

Claims

1. A method for identifying a *Mycobacterium* species comprising the steps of:

5 a) contacting at least one immuno-cross reactive antigen component of a mycobacterial species with a sample of a body fluid of a human or animal individual;

b) contacting at least one antibody, which is capable of reacting with a mycobacterial antigen, with said body fluid sample;

10 c) detecting the presence of antigen-antibody complexes, and identifying the *Mycobacterium* species present in said body fluid sample.

2. A method according to claim 1, wherein the sample of a body fluid is chosen from the group consisting of serum, blood and excretion fluids, such as sputum, saliva, 15 CSF (cerebrospinal fluid), or tear fluid, and solutions or preparations thereof.

3. A method according to any of the preceding claims, wherein the at least one immuno-cross-reactive antigen component is bound to a support.

20 4. A method according to any of the preceding claims, wherein the at least one antibody for a mycobacterial species is bound to a support.

5. A method according to any of the preceding claims, wherein steps a) and b) are performed simultaneously.

25 6. A method according to claim 5, wherein the at least one immuno-cross-reactive antigen component and the at least one antibody for a mycobacterial species are bound to the same solid support, and wherein said antibody does not react with the at least one immuno-cross-reactive antigen 30 component.

7. A method according to claim 6, wherein the support is chosen from the group consisting of membranes, dip-sticks, filters, spheres, granules and microtiter plates.

8. A method according to any of the preceding claims, wherein the at least one antibody for a mycobacterial species is a monoclonal antibody.

5 9. A method according to any of the preceding claims, wherein the detecting the presence of antigen-antibody complexes is performed by using an indirect or direct labeling method.

10 10. A method according to claim 9, wherein the detecting is performed by using a label chosen from the group of biotin, biocytin, iminobiotin, digoxigenin, avidin, streptavidin, colloidal dye substances, fluorochromes, such as rhodamin, reducing substances, such as eosin or erythrosin, (colored) latex sols, carbon sols, metals, metal sols or other particulate sols, dansyl lysin, Infra Red Dyes, 15 coumarines, enzymes, and iodide labels.

11. A method according to any of the preceding claims, wherein the *Mycobacterium* species is identified on the basis of one or more reference patterns.

20 12. A method according to any of the preceding claims, wherein the at least one immuno-cross reactive antigen component comprises the total of a preparation of *Mycobacterium* species, or the total of the culture medium of said species.

25 13. A method according to claims 1-11, wherein the at least one immuno-cross reactive antigen component comprises a KP90, KS90, antigen6, KP100 or SP100 fraction of a total preparation of a *Mycobacterium* species, or a suitable fraction of a culture medium of said species.

30 14. A method according to any of the preceding claims, wherein the at least one antibody for a mycobacterial species comprises IgG, IgA, IgM or any combination thereof.

35 15. A diagnostic kit comprising a support, on which at least one immuno-cross reactive antigen component of a mycobacterial species and at least one antibody, which is capable of reacting with a mycobacterial antigen and which does not react with said at least one immuno-cross reactive

antigen component, are bound, and means for detecting the presence of antigen-antibody complexes.

16. A diagnostic kit according to claim 15,  
wherein the support is chosen from the group consisting of  
5 membranes, dip-sticks, filters, spheres, granules and  
microtiter plates.